SERVICE MANUAL

SANYO

STEREO TURNTABLE

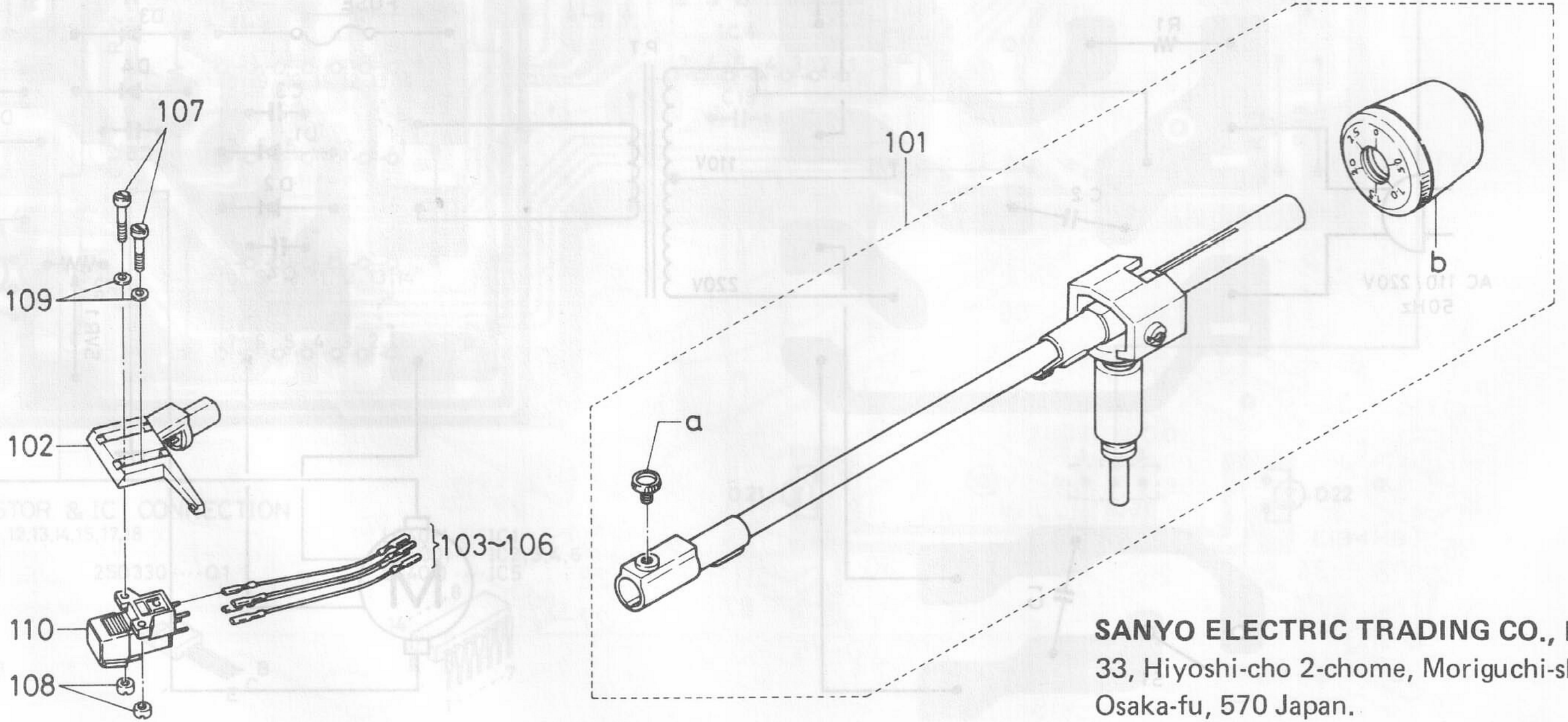
TP 1400

(EUROPE)

SPECIFICATIONS

Motor	DC FG servo motor
Drive system	Belt drive / Full auto
Speed	33-1/3 and 45 rpm
Speed deviation	± 3.0%
Wow and flutter	0.05% (WRMS)
Rumble	−70dB (DIN B spec)
Turntable platter	306 mm (12″)
Tone arm	Static-balance Straight type
Tracking error	±1.5°
Overhang	15 mm
Cartridge	Magnetic stereo cartridge: VM type No. AT3601
Stylus	0.6 mil diamond stylus No. ATN3601
Stylus pressure	1.5 – 2.5 g
Frequency response	20 – 20,000 Hz
Channel separation	20 dB
Power source	AC: 220V, 50 Hz
Power consumption	6.5W
Dimensions (Approx.)	420(W) x 370(D) x 126(H) mm (16-1/2″ x 14-1/2″ x 5″)
Weight (Approx.)	4 kg (9 lbs.)

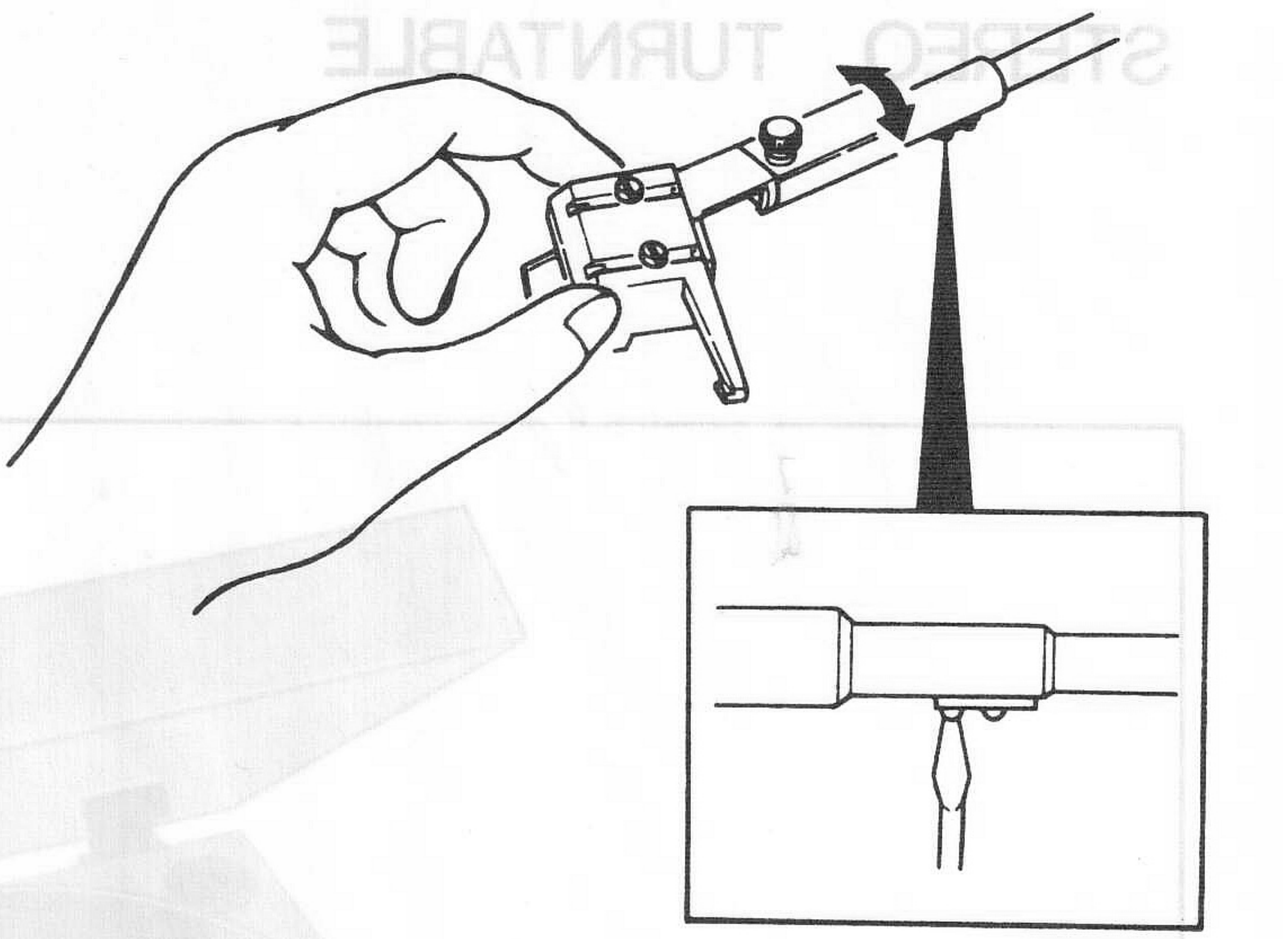
ARM EXPLODED VIEW



SANYO ELECTRIC TRADING CO., LTD.
33, Hiyoshi-cho 2-chome, Moriguchi-shi,
Osaka-fu, 570 Japan.

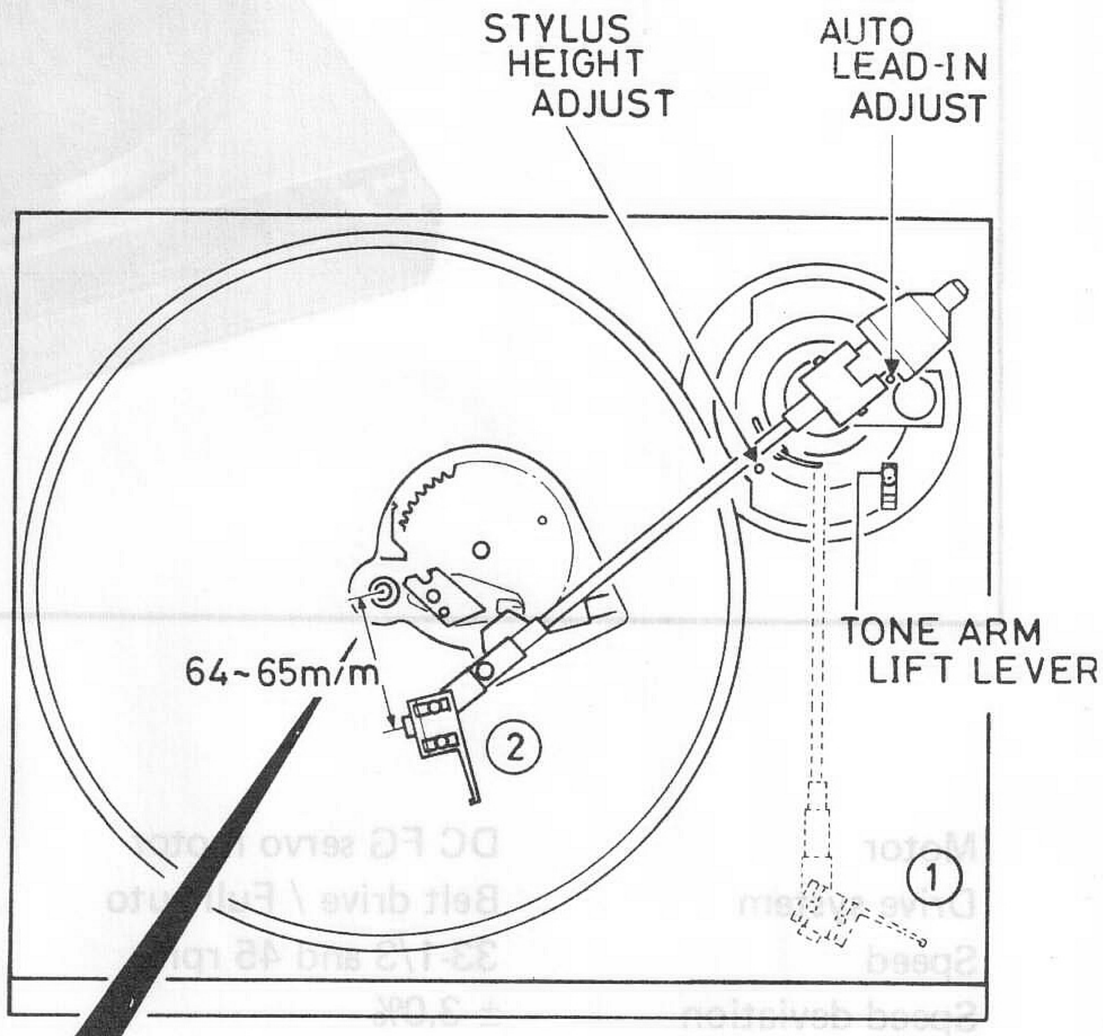
ADJUSTMENT OF HEADSHELL

The headshell attached to the tonearm should not be inclined either to the right or to the left. If necessary, loosen the two screws on the bottom of the tubular arm and adjust the headshell. Be sure that the stylus is normal to the record surface.



ADJUSTMENT OF AUTO-RETURN

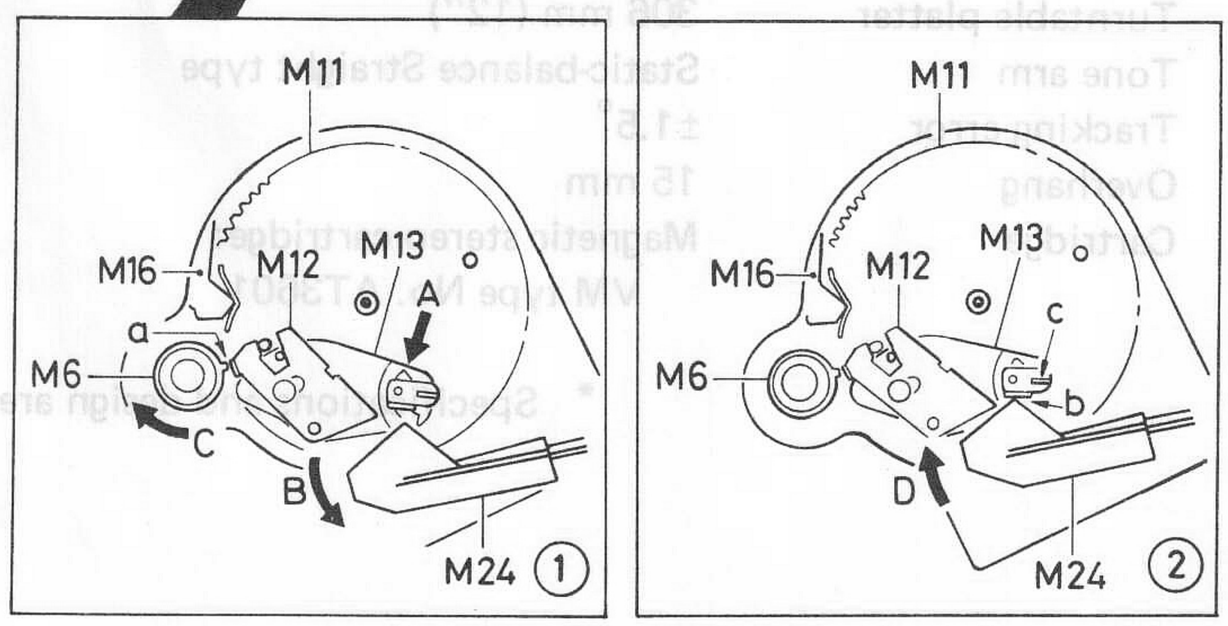
Remove the turntable to set the tone arm in the reset position (1). Under this state, move the gear so that the tip of lever M16 intermeshes with the withdrawn part of cam for main gear. Besides, lower trip lever M13 and trip lever M24 pushed toward the arrow marks A and B, respectively. Turn pipe assy. M6 toward the arrow mark C to set so that the convex part of pinion and the tip of claw for the egagement lever M12 contact each other (arrow mark a). Next, move the tone arm (toward arrow mark D). When the distance between the center shaft of turntable and the needle tip becomes 64 thru 65 mm (2), insert a blade screwdriver into part C, and adjust by turning it clockwise or counterclockwise so that the tip of trip lever M24 begins to contact with lower trip lever M13 (arrow mark b). Finally put on the turntable, and check the performance of auto-return.



ADJUSTMENT OF AUTO. LEAD–IN

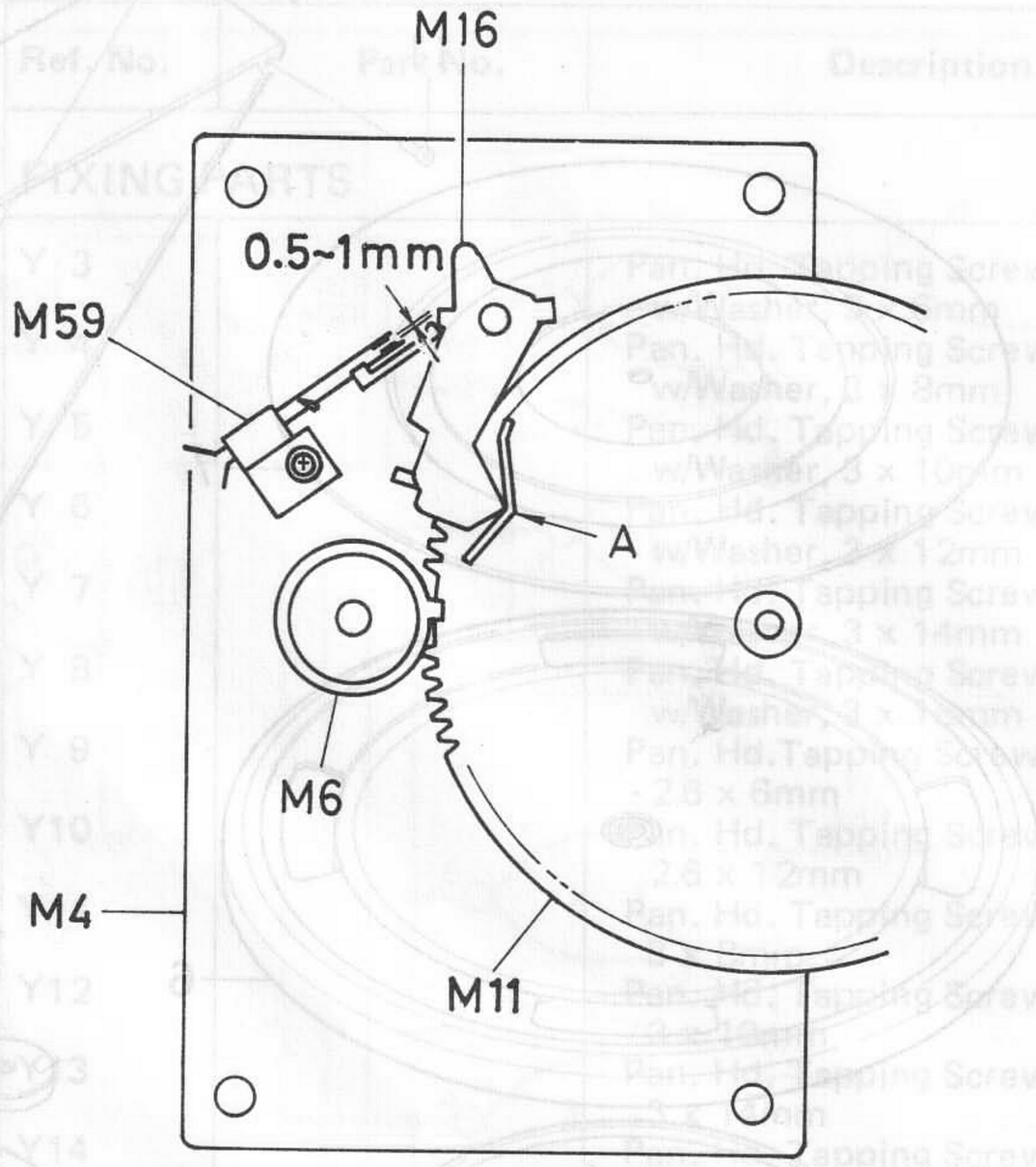
Place a record disk on the turntable, and depress the START/STOP switch to check the dropping position of needle tip.

Should the needle tip not drop nicely onto the lead-in groove of record disk, insert a screwdriver into the "AUTO. LEAD–IN ADJUST" hole, and turn it appropriately to adjust the dropping position of needle tip.



ADJUSTMENT OF LEAF SWITCH

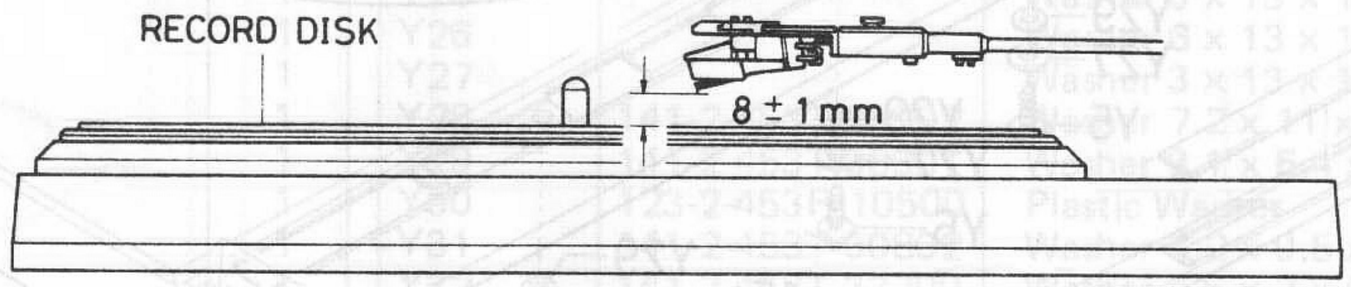
Fix leaf switch M59 so that its inter-contact distance will become 0.5 ~ 1 mm when the tip of lever M16 intermeshes with the withdrawn part of cam area (arrow A) of main gear M11.



ADJUSTMENT OF STYLUS HEIGHT

Setting the record disk in place, raise the tonearm lift lever.

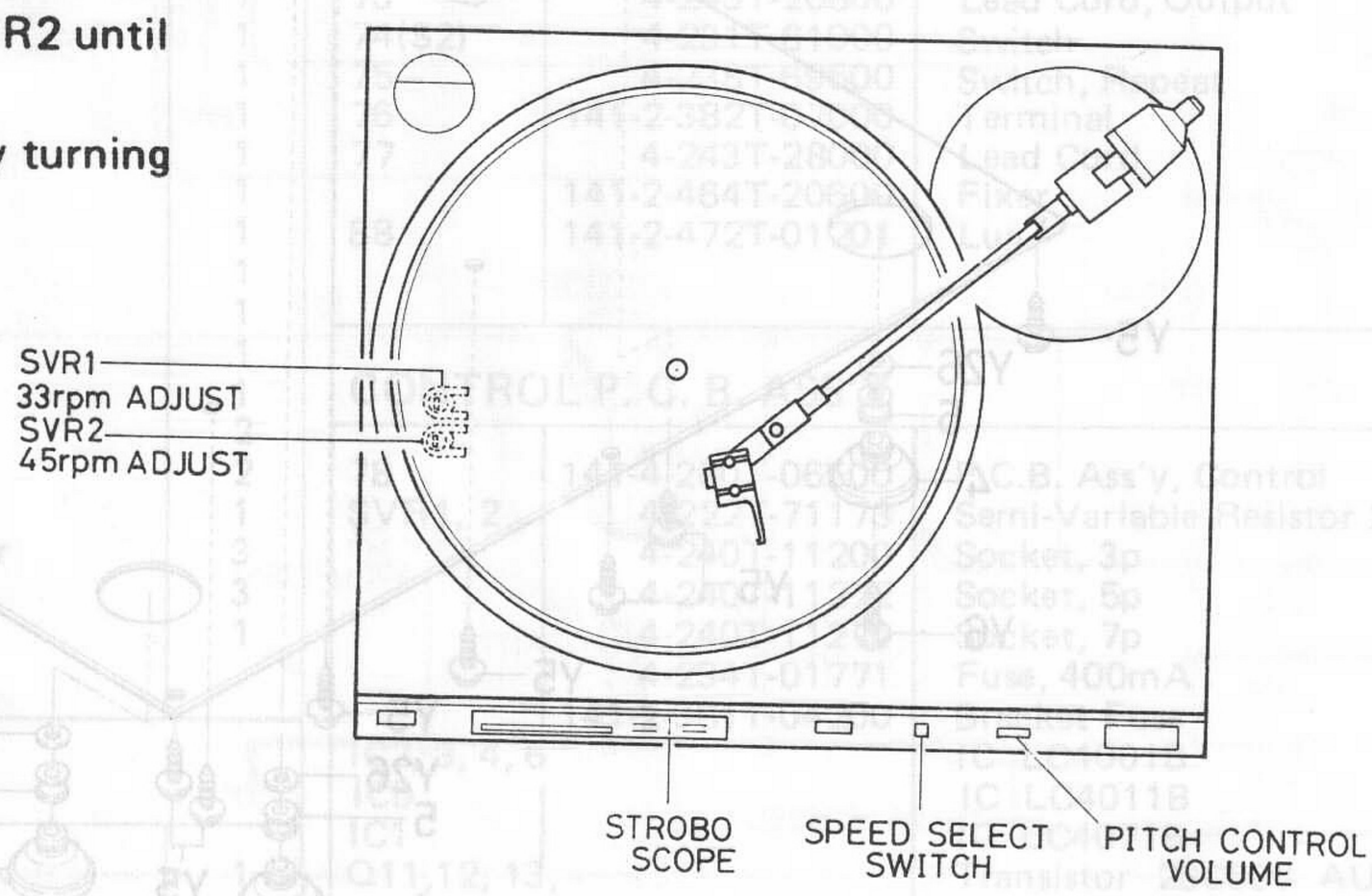
Bring the tonearm to above the disk, and insert a screw-driver into the "stylus height adjust" hole (see drawing for ADJUSTMENT OF AUTO-RETURN) and turn it right or left until the distance between the disk and stylus becomes 8 ± 1mm.



ADJUSTMENT OF TURNTABLE SPEED

Setting the pitch control in the middle position, place the speed select switch in the 45 rpm position. Insert a screw-driver from the bottom of deck panel and turn SVR2 until the stroboscope pattern appears dead.

Similarly, change to 33 rpm position, and adjust by turning SVR1.



R13
15K

Q11
2SC
536E

R14
68K

C11
0.022

R15
10K

C17
10µF/
16V

R16
15K

R17 100K

R18
15K

Q12
2SC536E

Q14 2SC536E

R32 39K

R33
3,9K

C20
33µF/16V

R36 22K

Q19 2SA608E

Q17
2SC536E

R38
2,2K

R39
12K

R40
12K

R41
12K

Q18
2SC536E

R42
1,2K

R37
3,9K

R30
10K

FUSE
T400mA

C3 0,01

C5 0,01

D1

D3

D2

D4

C4 0,01

C6 0,01

D1~D4 DS135E

R19
68K

C14
0.047

S

$\bar{Q}$

R

Q

D13
DS442X

R20
100K

C21
2,2µF
16V

R28
680K

D11
DS442X

C18
1µF/16V

R29
10K

R34
22K

R35
3,9K

Q15 2SC536E

Q16
2SD545E

D14
DS135E

PLUNGER

S5
MECHA SW

C12
0,022

C13
0,022

R26
2,2M

R27
10K

C15
0,047

R22 68K

R25
15K

R23
22K

Q13
2SC536E

C19
47µF/
16V

R24
2,7K

R21
68K

Q1
2SD330E

+12V

R2
1K 1/2W

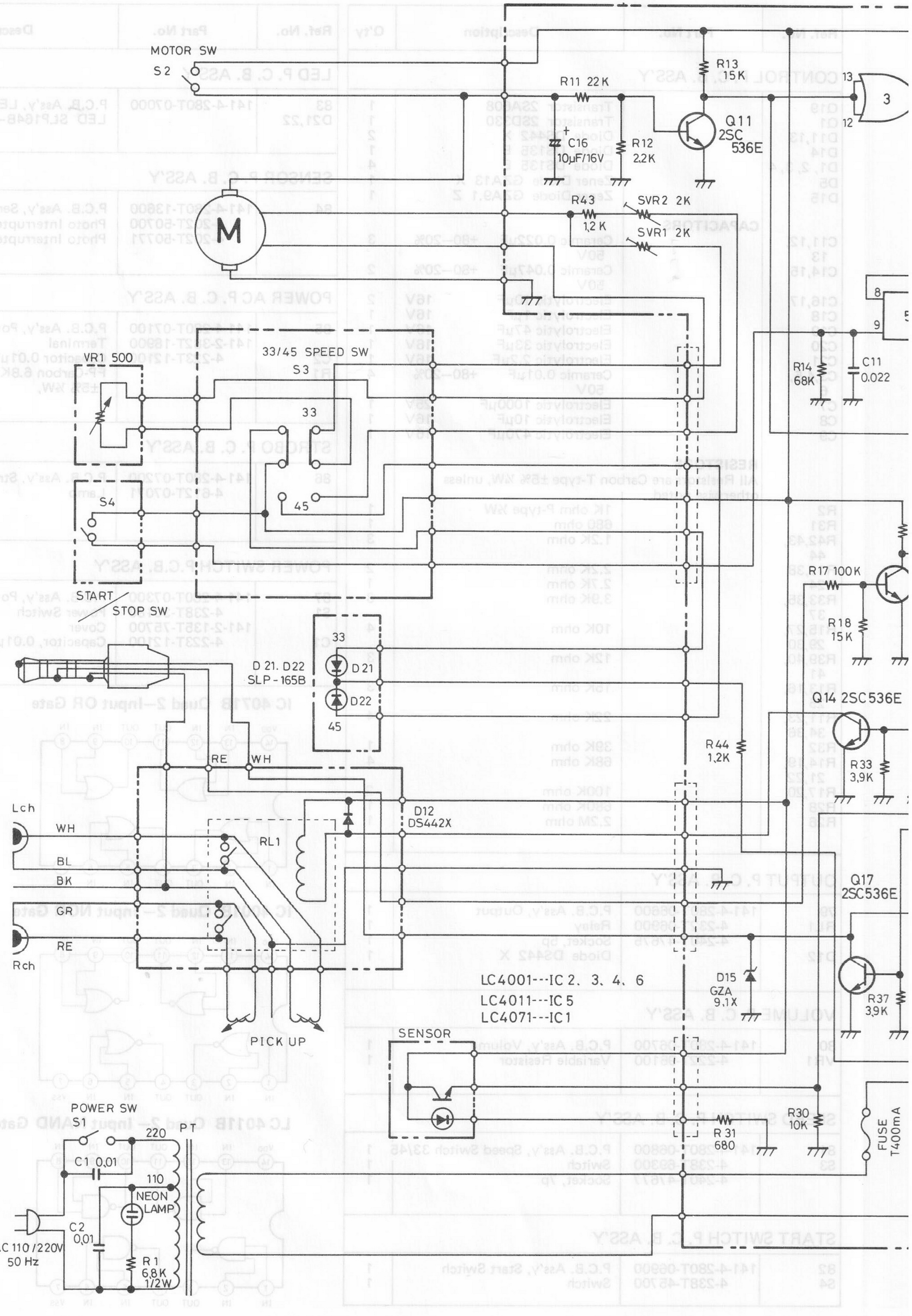
C7
1000µF
25V

C8
10µF/16V

D5
GZA13X

C9
470µF/16V

DIAGRAM


MOTOR SW
S2
M
R11 22K
R13 15K
C16 10μF/16V
R12 2.2K
Q11 2SC 536E
13
12
3
R43 1.2K
SVR2 2K
SVR1 2K
VR1 500
33/45 SPEED SW
S3
33
45
S4
START
STOP SW
R14 68K
C11 0.022
8
9
R17 100K
R18 15K
Q14 2SC536E
D 21. D22 SLP-165B
D21
D22
R44 1.2K
R33 3.9K
RE
WH
Lch
WH
BL
BK
GR
RE
Rch
RL1
D12 DS442X
Q17 2SC536E
R37 3.9K
LC4001---IC 2. 3. 4. 6
LC4011---IC 5
LC4071---IC 1
D15 GZA 9.1X
SENSOR
PICK UP
R30 10K
R 31 680
FUSE T400mA
POWER SW
S1
220
PT
C1 0.01
110
NEON LAMP
C2 0.01
AC 110/220V 50 Hz
R 1 6.8K 1/2W

MECHANISM EXPLODED VIEW